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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/245,592 02/08/99 ADDY

J 8321

EXAMINER

TM02/0522

PAUL W MARTIN
NCR CORPORATION LAW DEPARTMENT
INTELLECTUAL PROPERTY SECTION
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WASYLCHAK, S

ART UNIT

PAPER NUMBER

2165

DATE MAILED:

05/22/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/245592

Applicant(s)

ADDY et al

Examiner

WASYLCNAK

Group Art Unit

2165

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 2/14/01
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-17 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-17 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Response to Amendment

Claims 1-3,6-9,12-15 are rejected under 35 USC 103(a) Novak (US 5,497,314) and in view of Lutz (US 6,04,262) and further in view of Addy (US 5,965,861) for the reasons advanced in the last office action dated 9/13/00.

Claims 4,5,10,11,16, and 17 are also rejected under 35 USC 103(a) as being unpatentable over Novak and in view of Lutz for the reasons advanced in the last office action dated 9/13/00.

Response to Amendments:

35 USC 103(a) Rejections

Amended claims 1, 7 and 13 are rejected under 35USC 103(a) as being unpatentable over Novak (US 5,497,314) and in view of Lutz (US 6047262) and further in view of Addy et al (US 5,965,861).

As per amended cl 1,

A method of operating a retail system which includes

(i) a plurality of self-service checkout terminals, / col 12: CL 18; fig 5; col 2, L 11-13.

(ii) a first remote supervisor terminal, and / Novak does not explicitly teach a first or any remote supervisor terminal.

However, Novak implicitly teaches additional cameras (col 8, L 13-18). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to

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use additional cameras for supervisory functions for the advantage of increasing the target area of the number of checkout counters covered and as a "backup" unit as well as for training purposes.

Furthermore, Lutz discloses a second remote terminal (a display terminal used to observe all the views - individually or jointly - of a number of video cameras) as part of a closed -circuit surveillance video system (col 1, L 60-63). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a secondary terminal feature to gain the advantages of having a "backup" terminal should the first terminal breakdown or be down due to maintenance and for security surveillance.

While both Novak and Lutz fail to explicitly teach the supervisory aspect of the remote supervisory terminal, Addy teaches the supervisory aspect of a checkout terminal video system: col 4, L 17-21. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a checkout terminal feature to gain the advantage of centralized management control and for security surveillance.

(iii) a second remote supervisor terminal, / Novak does not explicitly teach a first or any remote supervisor terminal.

However, Novak implicitly teaches additional cameras (col 8, L 13-18). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to

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use additional cameras for supervisory functions for the advantage of increasing the target area of the number of checkout counters covered and as a "backup" unit as well as for training purposes.

Furthermore, Lutz discloses a second remote terminal (a display terminal used to observe all the views - individually or jointly - of a number of video cameras) as part of a closed-circuit surveillance video system (col 1, L 60-63). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a secondary terminal feature to gain the advantages of having a "backup" terminal should the first terminal breakdown or be down due to maintenance and for security surveillance.

While both Novak and Lutz fail to explicitly teach the supervisory aspect of the remote supervisory terminal, Addy teaches the supervisory aspect of a checkout terminal video system: col 4, L 17-21. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a checkout terminal feature to gain the advantage of centralized management control and for security surveillance.

-operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of each of said plurality of self-service checkout terminals during a first period of time; / Novak does not explicitly teach a first remote supervisor terminal performing this specific function during the first period. Official notice is taken that it would have been obvious to one of ordinary skill in the art at the time of

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applicant's invention to implement such a feature to gain the advantage of efficiency by systematically monitoring checkout terminals over specific time frames by the fewest number of supervisor terminals without duplication and with the rest being in idle mode.

-maintaining said second remote supervisor terminal in an idle mode of operation such that said second remote supervisor terminal does not monitor operation of any of said plurality of self-service checkout terminals during said first period of time; / Novak does not explicitly teach a first remote supervisor terminal performing this specific function during the first period. Official notice is taken that it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by systematically monitoring checkout terminals over specific time frames by the fewest number of supervisor terminals without duplication and with the rest being in idle mode.

-operating said first remote supervisor terminal such that said first remote supervisor terminal monitors operation of a first group of said plurality of self-service checkout terminals during a second period of time; and / Novak does not explicitly teach a first remote supervisor terminal performing this specific function during the first period.

Official notice is taken that it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by systematically monitoring checkout terminals over specific time frames by the fewest number of supervisor terminals without duplication and with the rest being in idle mode.

-operating said second remote supervisor terminal such that said second remote supervisor terminal monitors operation of a second group of said plurality of self-service checkout terminals during said second period of time, / Novak does not explicitly teach a second remote supervisor terminal performing this specific function during the first period. Official notice is taken that it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by systematically monitoring checkout terminals over specific time frames by the fewest number of supervisor terminals without duplication and with the rest being in idle mode.

-wherein said first group of said plurality of self-service checkout terminals is different from said second group of said plurality of self-service checkout terminals. / Novak: fig 5 and fig 6

-wherein said first remote supervisor terminal is configured to enable a store employee located at said first remote supervisor terminal to communicate with customers respectively located at each of said first group of said plurality of self-service checkout terminals via audio, video, and data connection during step (c), and / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

-wherein said second remote supervisor terminal is configured to enable a store employee located at said second remote supervisor terminal to communicate with customers respectively located at each said second group of said plurality of self-service checkout terminals via audio, video, and data

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connection during step (d). / Novak does not teach an audio, video, and data connection. However, Addy et al teaches an audio, video and data connection /col 3, L 7-44; L 55-65

As per amended claim 7,

A method of operating a retail system, comprising the steps of:

(a) operating a first remote supervisor terminal so as to monitor operation of a first group of self-service checkout terminals during a first period of time; / However, Novak does not explicitly teach the permutation of a sequential assignment of different terminals to different groups over *different* time periods.

Official notice is taken that this feature is old and well known in the point of sale art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by minimizing customer checkout time by utilizing basic operations research with linear programming and queuing theory.

(b) operating a second remote supervisor terminal so as to monitor operation of a second group of self-service checkout terminals during said first period of time; /

However, Novak does not explicitly teach the permutation of a sequential assignment of different terminals to different groups over *different* time periods.

Official notice is taken that this feature is old and well known in the point of sale art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by minimizing

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customer checkout time by utilizing basic operations research with linear programming and queuing theory.

(c) operating said first remote supervisor terminal so as to monitor operation of said second group of self-service checkout terminals during a second period of time; and / However, Novak does not explicitly teach the permutation of a sequential assignment of different terminals to different groups over *different* time periods.

Official notice is taken that this feature is old and well known in the point of sale art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by minimizing customer checkout time by utilizing basic operations research with linear programming and queuing theory.

(d) operating said second remote supervisor terminal so as to monitor operation of said first group of self-service checkout terminals during said second period of time, / However, Novak does not explicitly teach the permutation of a sequential assignment of different terminals to different groups over *different* time periods.

Official notice is taken that this feature is old and well known in the point of sale art.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to implement such a feature to gain the advantage of efficiency by minimizing customer checkout time by utilizing basic operations research with linear programming and queuing theory.

wherein said first group of self-service checkout terminals is different from said second group of self-service checkout terminals,/ Novak: fig 6

wherein said first remote supervisor terminal is configured to enable a store employee located at said first remote supervisor terminal to communicate with customers respectively located at each of said first group of self-service checkout terminals via audio, video, and data connection during step (a), / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

wherein said second remote supervisor terminal is configured to enable a store employee located at said second remote supervisor terminal to communicate with customers respectively located at each of said second group of self-service checkout terminals via audio, video, an data connection during step b / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

wherein said first remote supervisor terminal is configured to enable a store employee located at said first remote supervisor terminal to communicate with customers respectively located at each of said second group of self-service checkout terminals via audio, video, an data connection during step (c) / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

wherein said second remote supervisor terminal is configured to enable a store employee located at said second remote supervisor terminal to communicate with customers respectively located at each of said first group of self-service checkout terminals via audio, video, and data connection during step (d) / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

As per amended cl 13,

A self-service retail system comprising-
a plurality of self-service checkout terminals for allowing a plurality of customers to checkout items for purchase; a first remote supervisor terminal electrically coupled via audio, video and data connection to each of said plurality of self-service checkout terminals so as to enable a store employee located at said first remote supervisor terminal to communicate with customers respectively located at each of said plurality of self-service checkout terminals via said audio video and data connection; and / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

a second remote supervisor terminal electrically coupled via audio video and data connection to each of said plurality of self-service checkout terminals so as to enable a store employee located at said second remote supervisor terminal to communicate with customers respectively located at each of said plurality of self-service checkout terminals via said audio video and

connection. / Novak does not teach an audio, video, and data connection. However, Addy et al teaches audio, video and data connection /col 3, L 7-44; L 55-65

Response to Attorney's Discussion Re: Patentability of Claim 1:

Atty argues on p 9, first paragraph that supervisory terminals dedicated or crosslinked to several checkout terminals by audio, video and data connection are not suggested by Novak (US 5,497,314).

However, audio, video and data connection are implicitly subsumed in: abstract, L 1-5: "other means" and in combination with col 8, L 33-36: "...alternative embodiments and all revisions and variations that would be obvious to those skilled in the art will be included within the scope of the following claims." Official notice is taken that audio, video and data connection are old and well-known in the both the retail and security industry. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include as the "other means multiplex (to reach each checkout terminal from one source) modification or "modularize" the audio, video and data connection for the advantage of "back-up" during breakdown or maintenance and for flexibility in response to different customer scenarios such a customers having disabilities like visual or hearing impairments in light of the Americans with Disabilities Act of 1964.

Atty argues on p 9, second paragraph, that supervisory terminals are dedicated and crosslinked to several checkout terminals by audio, video and data connection is not suggested by Lutz (US 5,952,642).

Again, Official notice is taken that audio, video and data connection are old and well-known in the both the retail and security industry. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include as the "other means multiplex (to reach each checkout terminal from one source) modification or "modularize" the audio, video and data connection for the advantage of "back-up" during breakdown or maintenance and for flexibility in response to different customer scenarios such a customers having disabilities like visual or hearing impairments in light of the Americans with Disabilities Act of 1964.

Atty argues on p 9, third paragraph, to p 10, first paragraph, that Addy's unit processor element number 12 is not configured ". . .to communicate with customers respectively located at each of said plurality of self-service checkout terminals via audio, video, and data connection as required by Applicant's claim 1 (Applicant underscore) ".

However, Official notice is taken that audio, video and data connection are old and well-known in the both the retail and security industry. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include by re-programming the processor (microprocessor) and multiplexing (to reach each checkout terminal from one source) modification or "modularizing" the audio, video and data connection for the advantage of "back-up" during breakdown or maintenance and for flexibility in response to different customer scenarios such a customers having the disabilities of, but not limited to, visual or hearing impairments in light of the Americans with Disabilities Act of 1964.

Atty argues on p 10, first paragraph, that the monitoring function of Lutz does not "relate to enabling a store employee located at a remote supervisor terminal to communicate with customers respectively located at each of a plurality of self-service checkout terminals via audio, video, and data connection as required by Applicant's claim 1."

Again, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include by re-programming the processor (microprocessor) and multiplexing (to reach each checkout terminal from one source) modification or "modularizing" the audio, video and data connection for the advantage of "back-up" during breakdown or maintenance and for flexibility in response to different customer scenarios such a customers having the disabilities of, but not limited to, visual or hearing impairments in light of the Americans with Disabilities Act of 1964.

Response to Attorney's Discussion Re: Patentability of Claims 7 and 13:

Examiner's arguments for claim 1 are directly relevant to claims 7 and 13, notably, that it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include by re-programming the processor (microprocessor) and by a multiplexing (to reach each checkout terminal from one source) modification or "modularizing" the audio, video and data connection for the advantage of "back-up" during breakdown or maintenance and for flexibility in response to different customer scenarios such a customers having the disabilities of, but not limited to, visual or hearing impairments in light of the Americans with Disabilities Act of 1964.

Response to Attorney's Discussion Re: all other (dependent) claims:

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All dependent claims: 2-6, 8-12, 14-17 fall by their respective dependence upon rejected independent claims.

Conclusion

Note the additions to Notice of Reference Cited. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Steven R. Wasylchak, whose telephone number is (703) 308-2848. The examiner can normally be reached on weekdays from 7:00 a.m. to 7:00 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin, can be reached at (703) 305-1065. The fax phone number for Art Unit 2165 is (703) 308-1396.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at (703) 305-3900.

SRW DATE

Sw 5/21/01



VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2165